

ROUTE NO.	SECTION	COUNTY	STATION	SHEET	SHEET NO.
FAP 0525		WINNEBAGO	157	101	44
FED. ROAD DIST. NO. 7					ILLINOIS
• 02-00518-00-BR					

The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



\*\* ONE PIECE

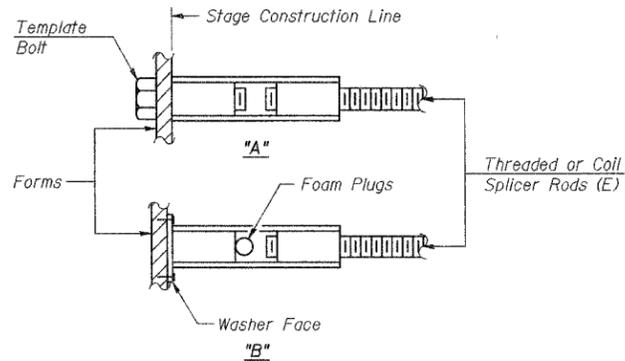
Wire Connector



WELDED SECTIONS

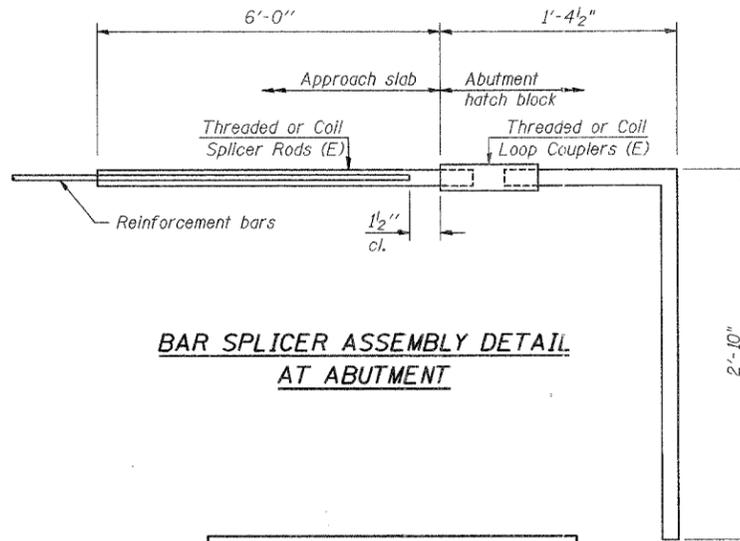
**BAR SPLICER ASSEMBLY ALTERNATIVES**

\*\* Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



**INSTALLATION AND SETTING METHODS**

"A" : Set bar splicer assembly by means of a template bolt.  
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.  
 (E) : Indicates epoxy coating.



**BAR SPLICER ASSEMBLY DETAIL AT ABUTMENT**

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 9.2 kips - tension
No. Required = 82

**NOTES**

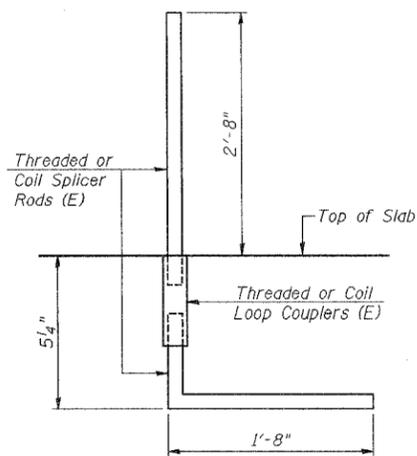
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.  
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.  
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.  
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.  
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity (Tension in kips) =  $1.25 \times f_y \times A_t$
- Minimum \*Pull-out Strength (Tension in kips) =  $1.25 \times f_{s,allow} \times A_t$

Where  $f_y$  = Yield strength of lapped reinforcement bars in ksi.  
 $f_{s,allow}$  = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)  
 $A_t$  = Tensile stress area of lapped reinforcement bars.  
 \* = 28 day concrete

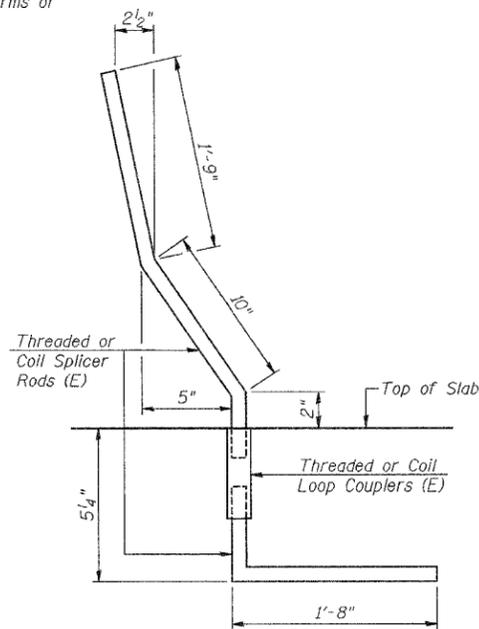
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



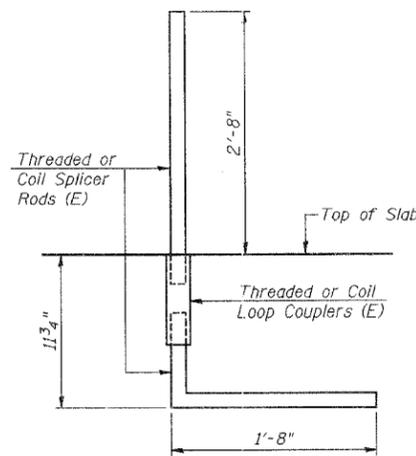
**TYPE I BAR SPLICER ASSEMBLY**

Bar Size	No. Assemblies Required	Location
#4	455	S. Parapet on Bridge, Outside Face



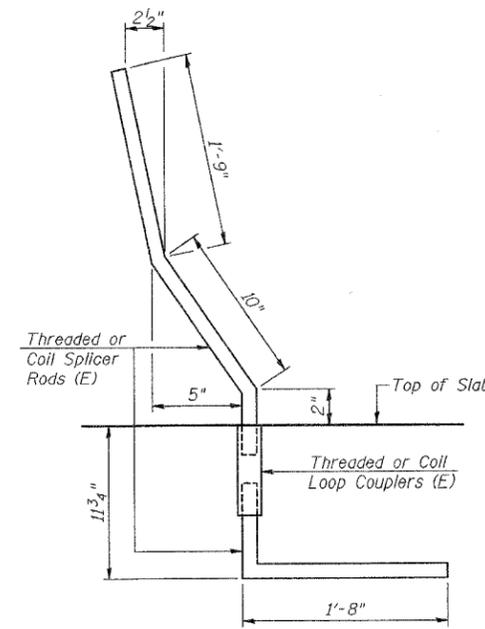
**TYPE II BAR SPLICER ASSEMBLY**

Bar Size	No. Assemblies Required	Location
#5	455	S. Parapet on Bridge, Inside Face



**TYPE III BAR SPLICER ASSEMBLY**

Bar Size	No. Assemblies Required	Location
#4	73	S. Parapet on Approach, Outside Face



**TYPE IV BAR SPLICER ASSEMBLY**

Bar Size	No. Assemblies Required	Location
#5	73	S. Parapet on Approach, Inside Face

Corporate License Number 184-001-084

**BAR SPLICER ASSEMBLY DETAILS**

EASTBOUND HARRISON AVENUE  
 OVER UP & CC&P RAILROAD  
 F.A.P. ROUTE 0525  
 SECTION 02-00518-00-BR  
 ROCKFORD, ILLINOIS  
 STATION 95+72.00  
 STRUCTURE NO. 101-6111

© Copyright Hanson Professional Services Inc. 2006



JOB NO. 03R1751

DATE 12/14/06

3/21/06 PM 12/12/2006 05:32 PM I:\02\0518\02\00518\Struct\Sheet\East\_Burns\044-EB-Br-Splicer.dgn

LAYOUT JKR 02/01/06  
 DRAWN MWM/JKR 07/24/06  
 REVIEWED FLN 08/05/06